Attorney Docket No.: 5470-276

Serial No. 10/069,305 Filed: June 6, 2002

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## **REMARKS**

Claims 27-32 are pending in this application and were examined in the outstanding Office Action. Claims 27 and 32 are amended herein to specifically recite Venezuelan Equine Encephalitis virus. Support for these claim amendments is found throughout the specification as originally filed. In light of these amendments and the following remarks, Applicants respectfully request reconsideration of this application and allowance of the pending claims to issue.

## Claim Rejections under 35 U.S.C. § 103(a).

Claims 27-32 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 5,789,245 (Dubensky et al.) in view of Chanas et al. (*J. Gen. Virol.* 57: 38 (1982)). This rejection is respectfully traversed below.

Dubensky et al. describes alphavirus vectors, including vectors for prophylactic and/or therapeutic treatments. The Dubensky et al. reference does not disclose or suggest administration of an antibody that binds to the E1 glycoprotein and/or the E2 glycoprotein of a Venezuelan Equine Encephalitis (VEE) vector or that antibody-dependent enhancement can be achieved with VEE vectors. This deficiency of Dubensky et al. appears to be acknowledged in the outstanding Office Action (page 3, second paragraph).

The outstanding rejection combines Dubensky et al. with the teachings of Chanas et al., arguing that the Chanas et al. reference describes monoclonal antibodies specific for the E1 glycoprotein of Sindbis, which at sub-neutralizing dilutions can enhance infectivity for macro-phage-like cells.

The claims have been amended herein to specifically recite a "VEE" vector. The work of Chanas et al. is limited to Sindbis virus. Chanas et al. does not disclose or suggest administering a VEE vector and an antibody to a subject as recited by the present claims. Further, it certainly would not have been obvious to one of ordinary skill in the art from Chanas et al. that ADE of the infectivity of a VEE vector can be achieved *in vivo*. Further, contrary to the assertions in the Office Action, Chanas et al. observed neutralization not enhancement by one of the two antibodies evaluated *in vivo* when Sindbis virus was administered with antibody intracerebrally to newborn mice (see, Chanas et al., pages 43-44 "Sindbis virus neutralization in newborn mice" and Table 4).

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Neither of the antibodies evaluated by Chanas et al. enhanced infectivity in the newborn mouse brain. Thus, one skilled in the art would have no motivation to practice the presently claimed methods of *in vivo* administration of a VEE vector and an antibody based upon Chanas et al.

In view of the foregoing, Applicants respectfully submit that the subject matter of claims 27-32 is novel and nonobvious over Dubensky et al. in view of Chanas et al., and respectfully request that the rejection under 35 U.S.C. 103(a) over the combination of these references be withdrawn.

## Conclusion.

Having addressed all of the issues raised by the Examiner in the pending Office Action, Applicants respectfully request the withdrawal of the pending rejections and allowance of the pending claims to issue. The Examiner is invited and encouraged to contact the undersigned directly if such contact will expedite the prosecution of this application to allowance.

No fees are believed to be due with this response. However, the Commissioner is hereby authorized to charge any fee deficiency or credit any overpayment to Deposit Account No. 50-0220.

Respectfully submitted,

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## CERTIFICATION OF ELECTRONIC TRANSMISSION

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on September 12, 2007.

Katie Wu

Date of Signature: September 12, 2007